



#4



## SEQUENCE LISTING

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PÉTERFY, MIKLÓS

&lt;120&gt; A NOVEL GENE ASSOCIATED WITH REGULATION OF ADIPOSITY AND INSULIN RESPONSE

&lt;130&gt; 407T-898010US

&lt;140&gt; US 10/028,056

&lt;141&gt; 2001-12-19

&lt;150&gt; US 60/257,772

&lt;151&gt; 2000-12-22

&lt;160&gt; 25

&lt;170&gt; PatentIn version 3.0

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 Phe Gln Lys Pro Leu Pro Lys Ala Thr Val Glu Ser Ile Met Arg Asp  
 530 535 540  
 Lys Met Pro Lys Lys Gly Gly Arg Trp Trp Phe Ser Trp Arg Gly Arg  
 545 550 555 560  
 Asn Thr Thr Ile Lys Glu Glu Ser Lys Pro Glu Gln Cys Leu Ala Gly  
 565 570 575  
 Lys Ala His Ser Thr Gly Glu Gln Pro Pro Gln Leu Ser Leu Ala Thr  
 580 585 590  
 Arg Val Lys His Glu Ser Ser Ser Ser Asp Glu Glu Arg Ala Ala Ala  
 595 600 605  
 Lys Pro Ser Asn Ala Gly His Leu Pro Leu Leu Pro Asn Val Ser Tyr  
 610 615 620  
 Lys Lys Thr Leu Arg Leu Thr Ser Glu Gln Leu Lys Ser Leu Lys Leu  
 625 630 635 640  
 Lys Asn Gly Pro Asn Asp Val Val Phe Ser Val Thr Thr Gln Tyr Gln  
 645 650 655  
 Gly Thr Cys Arg Cys Glu Gly Thr Ile Tyr Leu Trp Asn Trp Asp Asp  
 660 665 670  
 Lys Val Ile Ile Ser Asp Ile Asp Gly Thr Ile Thr Arg Ser Asp Thr  
 675 680 685  
 Leu Gly His Ile Leu Pro Thr Leu Gly Lys Asp Trp Thr His Gln Gly  
 690 695 700  
 Ile Ala Lys Leu Tyr His Lys Val Ser Gln Asn Gly Tyr Lys Phe Leu

705		710		715		720
Tyr Cys Ser Ala Arg	Ala Ile Gly Met Ala Asp Met Thr Arg Gly Tyr					
	725		730		735	
Leu His Trp Val Asn Glu Arg Gly Thr Val Leu Pro Gln Gly Pro Leu						
	740		745		750	
Leu Leu Ser Pro Ser Ser Leu Phe Ser Ala Leu His Arg Glu Val Ile						
	755		760		765	
Glu Lys Lys Pro Glu Lys Phe Lys Val Gln Cys Leu Thr Asp Ile Lys						
	770		775		780	
Asn Leu Phe Phe Pro Asn Thr Glu Pro Phe Tyr Ala Ala Phe Gly Asn						
	785		790		795	800
Arg Pro Ala Asp Val Tyr Ser Tyr Lys Gln Val Gly Val Ser Leu Asn						
	805		810		815	
Arg Ile Phe Thr Val Asn Pro Lys Gly Glu Leu Val Gln Glu His Ala						
	820		825		830	
Lys Thr Asn Ile Ser Ser Tyr Val Arg Leu Cys Glu Val Val Asp His						
	835		840		845	
Val Phe Pro Leu Leu Lys Arg Ser His Ser Ser Asp Phe Pro Cys Ser						
	850		855		860	
Asp Thr Phe Ser Asn Phe Thr Phe Trp Arg Glu Pro Leu Pro Pro Phe						
	865		870		875	880
Glu Asn Gln Asp Ile His Ser Ala Ser Ala						
	885		890			

<210> 4

<211> 891

<212> PRT

<213> Mus musculus

<400> 4

Met Asn Tyr Val Gly Gln Leu Ala Gly Gln Val Phe Val Thr Val Lys						
1	5		10		15	
Glu Leu Tyr Lys Gly Leu Asn Pro Ala Thr Leu Ser Gly Cys Ile Asp						
	20		25		30	
Ile Ile Val Ile Arg Gln Pro Asn Gly Ser Leu Gln Cys Ser Pro Phe						
	35		40		45	

His Val Arg Phe Gly Lys Met Gly Val Leu Arg Ser Arg Glu Lys Val  
 50 55 60  
 Val Asp Ile Glu Ile Asn Gly Glu Ser Val Asp Leu His Met Lys Leu  
 65 70 75 80  
 Gly Asp Asn Gly Glu Ala Phe Phe Val Gln Glu Thr Asp Asn Asp Gln  
 85 90 95  
 Glu Ile Ile Pro Met Tyr Leu Ala Thr Ser Pro Ile Leu Ser Glu Gly  
 100 105 110  
 Ala Ala Arg Met Glu Ser Gln Leu Lys Arg Asn Ser Val Asp Arg Ile  
 115 120 125  
 Arg Cys Leu Asp Pro Thr Thr Ala Ala Gln Gly Leu Pro Pro Ser Asp  
 130 135 140  
 Thr Pro Ser Thr Gly Ser Leu Gly Lys Lys Arg Arg Lys Arg Arg Arg  
 145 150 155 160  
 Lys Ala Gln Leu Asp Asn Leu Lys Arg Asp Asp Asn Val Asn Ser Ser  
 165 170 175  
 Glu Asp Glu Asp Met Phe Pro Ile Glu Met Ser Ser Asp Glu Asp Thr  
 180 185 190  
 Ala Pro Met Asp Gly Ser Arg Thr Leu Pro Asn Asp Val Pro Pro Phe  
 195 200 205  
 Gln Asp Asp Ile Pro Lys Glu Asn Phe Pro Ser Ile Ser Thr His Pro  
 210 215 220  
 Gln Ser Ala Ser Tyr Pro Ser Ser Asp Arg Glu Trp Ser Pro Ser Pro  
 225 230 235 240  
 Ser Pro Ser Gly Ser Arg Pro Ser Thr Pro Lys Ser Asp Ser Glu Leu  
 245 250 255  
 Val Ser Lys Ser Ala Asp Arg Leu Thr Pro Lys Asn Asn Leu Glu Met  
 260 265 270  
 Leu Trp Leu Trp Gly Glu Leu Pro Gln Ala Ala Lys Ser Ser Ser Pro  
 275 280 285  
 His Lys Met Lys Glu Ser Ser Pro Leu Gly Ser Arg Lys Thr Pro Asp  
 290 295 300  
 Lys Met Asn Phe Gln Ala Ile His Ser Glu Ser Ser Asp Thr Phe Ser  
 305 310 315 320  
 Asp Gln Ser Pro Thr Met Ala Arg Gly Leu Leu Ile His Gln Ser Lys  
 325 330 335  
 Ala Gln Thr Glu Met Gln Phe Val Asn Glu Glu Asp Leu Glu Ser Leu  
 340 345 350

Gly Ala Ala Ala Pro Pro Ser Pro Val Ala Glu Glu Leu Lys Ala Pro  
 355 360 365  
 Tyr Pro Asn Thr Ala Gln Ser Ser Ser Lys Thr Asp Ser Pro Ser Arg  
 370 375 380  
 Lys Lys Asp Lys Arg Ser Arg His Leu Gly Ala Asp Gly Val Tyr Leu  
 385 390 395 400  
 Asp Asp Leu Thr Asp Met Asp Pro Glu Val Ala Ala Leu Tyr Phe Pro  
 405 410 415  
 Lys Asn Gly Asp Pro Gly Gly Leu Pro Lys Gln Ala Ser Asp Asn Val  
 420 425 430  
 Ala Arg Ser Ala Asn Gln Ser Pro Gln Ser Val Gly Gly Ser Gly Ile  
 435 440 445  
 Asp Ser Gly Val Glu Ser Thr Ser Asp Ser Leu Arg Asp Leu Pro Ser  
 450 455 460  
 Ile Ala Ile Ser Leu Cys Gly Gly Leu Ser Asp His Arg Glu Ile Thr  
 465 470 475 480  
 Lys Asp Ala Phe Leu Glu Gln Ala Val Ser Tyr Gln Gln Phe Ala Asp  
 485 490 495  
 Asn Pro Ala Ile Ile Asp Asp Pro Asn Leu Val Val Lys Val Gly Asn  
 500 505 510  
 Lys Tyr Tyr Asn Trp Thr Thr Ala Ala Pro Leu Leu Leu Ala Met Gln  
 515 520 525  
 Ala Phe Gln Lys Pro Leu Pro Lys Ala Thr Val Glu Ser Ile Met Arg  
 530 535 540  
 Asp Lys Met Pro Lys Lys Gly Gly Arg Trp Trp Phe Ser Trp Arg Gly  
 545 550 555 560  
 Arg Asn Ala Thr Ile Lys Glu Glu Ser Lys Pro Glu Gln Cys Leu Thr  
 565 570 575  
 Gly Lys Gly His Asn Thr Gly Glu Gln Pro Ala Gln Leu Gly Leu Ala  
 580 585 590  
 Thr Arg Ile Lys His Glu Ser Ser Ser Ser Asp Glu Glu His Ala Ala  
 595 600 605  
 Ala Lys Pro Ser Gly Ser Ser His Leu Ser Leu Leu Ser Asn Val Ser  
 610 615 620  
 Tyr Lys Lys Thr Leu Arg Leu Thr Ser Glu Gln Leu Lys Ser Leu Lys  
 625 630 635 640  
 Leu Lys Asn Gly Pro Asn Asp Val Val Phe Ser Val Thr Thr Gln Tyr

645										650					655						
Gln	Gly	Thr	Cys	Arg	Cys	Glu	Gly	Thr	Ile	Tyr	Leu	Trp	Asn	Trp	Asp						
			660					665					670								
Asp	Lys	Val	Ile	Ile	Ser	Asp	Ile	Asp	Gly	Thr	Ile	Thr	Arg	Ser	Asp						
		675					680					685									
Thr	Leu	Gly	His	Ile	Leu	Pro	Thr	Leu	Gly	Lys	Asp	Trp	Thr	His	Gln						
	690					695					700										
Gly	Ile	Ala	Lys	Leu	Tyr	His	Lys	Val	Ser	Gln	Asn	Gly	Tyr	Lys	Phe						
705					710					715					720						
Leu	Tyr	Cys	Ser	Ala	Arg	Ala	Ile	Gly	Met	Ala	Asp	Met	Thr	Arg	Gly						
				725					730					735							
Tyr	Leu	His	Trp	Val	Asn	Glu	Arg	Gly	Thr	Val	Leu	Pro	Gln	Gly	Pro						
			740					745					750								
Leu	Leu	Leu	Ser	Pro	Ser	Ser	Leu	Phe	Ser	Ala	Leu	His	Arg	Glu	Val						
		755					760					765									
Ile	Glu	Lys	Lys	Pro	Glu	Lys	Phe	Lys	Val	Gln	Cys	Leu	Thr	Asp	Ile						
	770					775					780										
Lys	Asn	Leu	Phe	Phe	Pro	Asn	Thr	Glu	Pro	Phe	Tyr	Ala	Ala	Phe	Gly						
785					790					795					800						
Asn	Arg	Pro	Ala	Asp	Val	Tyr	Ser	Tyr	Lys	Gln	Val	Gly	Val	Ser	Leu						
				805					810					815							
Asn	Arg	Ile	Phe	Thr	Val	Asn	Pro	Lys	Gly	Glu	Leu	Val	Gln	Glu	His						
			820					825					830								
Ala	Lys	Thr	Asn	Ile	Ser	Ser	Tyr	Val	Arg	Leu	Cys	Glu	Val	Val	Asp						
		835					840					845									
His	Val	Phe	Pro	Leu	Leu	Lys	Arg	Ser	His	Ser	Cys	Asp	Phe	Pro	Cys						
	850					855					860										
Ser	Asp	Thr	Phe	Ser	Asn	Phe	Thr	Phe	Trp	Arg	Glu	Pro	Leu	Pro	Pro						
865					870				875						880						
Phe	Glu	Asn	Gln	Asp	Met	His	Ser	Ala	Ser	Ala											
				885					890												

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<211> 924

<212> PRT

<213> Mus musculus

<400> 5

Met Asn Tyr Val Gly Gln Leu Ala Gly Gln Val Phe Val Thr Val Lys  
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Glu Leu Tyr Lys Gly Leu Asn Pro Ala Thr Leu Ser Gly Cys Ile Asp  
20 25 30

Ile Ile Val Ile Arg Gln Pro Asn Gly Ser Leu Gln Cys Ser Pro Phe  
35 40 45

His Val Arg Phe Gly Lys Met Gly Val Leu Arg Ser Arg Glu Lys Val  
50 55 60

Val Asp Ile Glu Ile Asn Gly Glu Ser Val Asp Leu His Met Lys Leu  
65 70 75 80

Gly Asp Asn Gly Glu Ala Phe Phe Val Gln Glu Thr Asp Asn Asp Gln  
85 90 95

Glu Ile Ile Pro Met Tyr Leu Ala Thr Ser Pro Ile Leu Ser Glu Gly  
100 105 110

Ala Ala Arg Met Glu Ser Gln Leu Lys Arg Asn Ser Val Asp Arg Ile  
115 120 125

Arg Cys Leu Asp Pro Thr Thr Ala Ala Gln Gly Leu Pro Pro Ser Asp  
130 135 140

Thr Pro Ser Thr Gly Ser Leu Gly Lys Lys Arg Arg Lys Arg Arg Arg  
145 150 155 160

Lys Ala Gln Leu Asp Asn Leu Lys Arg Asp Asp Asn Val Asn Ser Ser  
165 170 175

Glu Asp Glu Asp Met Phe Pro Ile Glu Met Ser Ser Asp Glu Asp Thr  
180 185 190

Ala Pro Met Asp Gly Ser Arg Thr Leu Pro Asn Asp Val Pro Pro Phe  
195 200 205

Gln Asp Asp Ile Pro Lys Glu Asn Phe Pro Ser Ile Ser Thr His Pro  
210 215 220

Gln Ser Ala Ser Tyr Pro Ser Ser Asp Arg Glu Trp Ser Pro Ser Pro  
225 230 235 240

Ser Ser Leu Val Asp Cys Gln Arg Thr Pro Pro His Leu Ala Glu Gly  
245 250 255

Val Leu Ser Ser Ser Cys Pro Leu Gln Ser Cys His Phe His Ala Ser  
260 265 270

Glu Ser Pro Ser Gly Ser Arg Pro Ser Thr Pro Lys Ser Asp Ser Glu

275		280		285
Leu Val Ser Lys Ser Ala Asp Arg Leu Thr Pro Lys Asn Asn Leu Glu				
290		295		300
Met Leu Trp Leu Trp Gly Glu Leu Pro Gln Ala Ala Lys Ser Ser Ser				
305		310		315 320
Pro His Lys Met Lys Glu Ser Ser Pro Leu Gly Ser Arg Lys Thr Pro				
	325		330	335
Asp Lys Met Asn Phe Gln Ala Ile His Ser Glu Ser Ser Asp Thr Phe				
	340		345	350
Ser Asp Gln Ser Pro Thr Met Ala Arg Gly Leu Leu Ile His Gln Ser				
	355		360	365
Lys Ala Gln Thr Glu Met Gln Phe Val Asn Glu Glu Asp Leu Glu Ser				
	370		375	380
Leu Gly Ala Ala Ala Pro Pro Ser Pro Val Ala Glu Glu Leu Lys Ala				
	385		390	395 400
Pro Tyr Pro Asn Thr Ala Gln Ser Ser Ser Lys Thr Asp Ser Pro Ser				
		405	410	415
Arg Lys Lys Asp Lys Arg Ser Arg His Leu Gly Ala Asp Gly Val Tyr				
	420		425	430
Leu Asp Asp Leu Thr Asp Met Asp Pro Glu Val Ala Ala Leu Tyr Phe				
	435		440	445
Pro Lys Asn Gly Asp Pro Gly Gly Leu Pro Lys Gln Ala Ser Asp Asn				
	450		455	460
Val Ala Arg Ser Ala Asn Gln Ser Pro Gln Ser Val Gly Gly Ser Gly				
	465		470	475 480
Ile Asp Ser Gly Val Glu Ser Thr Ser Asp Ser Leu Arg Asp Leu Pro				
	485		490	495
Ser Ile Ala Ile Ser Leu Cys Gly Gly Leu Ser Asp His Arg Glu Ile				
	500		505	510
Thr Lys Asp Ala Phe Leu Glu Gln Ala Val Ser Tyr Gln Gln Phe Ala				
	515		520	525
Asp Asn Pro Ala Ile Ile Asp Asp Pro Asn Leu Val Val Lys Val Gly				
	530		535	540
Asn Lys Tyr Tyr Asn Trp Thr Thr Ala Ala Pro Leu Leu Leu Ala Met				
	545		550	555 560
Gln Ala Phe Gln Lys Pro Leu Pro Lys Ala Thr Val Glu Ser Ile Met				
	565		570	575



Arg	Asp	Lys	Met	Pro	Lys	Lys	Gly	Gly	Arg	Trp	Trp	Phe	Ser	Trp	Arg	580	585	590
Gly	Arg	Asn	Ala	Thr	Ile	Lys	Glu	Glu	Ser	Lys	Pro	Glu	Gln	Cys	Leu	595	600	605
Thr	Gly	Lys	Gly	His	Asn	Thr	Gly	Glu	Gln	Pro	Ala	Gln	Leu	Gly	Leu	610	615	620
Ala	Thr	Arg	Ile	Lys	His	Glu	Ser	Ser	Ser	Ser	Asp	Glu	Glu	His	Ala	625	630	635
Ala	Ala	Lys	Pro	Ser	Gly	Ser	Ser	His	Leu	Ser	Leu	Leu	Ser	Asn	Val	645	650	655
Ser	Tyr	Lys	Lys	Thr	Leu	Arg	Leu	Thr	Ser	Glu	Gln	Leu	Lys	Ser	Leu	660	665	670
Lys	Leu	Lys	Asn	Gly	Pro	Asn	Asp	Val	Val	Phe	Ser	Val	Thr	Thr	Gln	675	680	685
Tyr	Gln	Gly	Thr	Cys	Arg	Cys	Glu	Gly	Thr	Ile	Tyr	Leu	Trp	Asn	Trp	690	695	700
Asp	Asp	Lys	Val	Ile	Ile	Ser	Asp	Ile	Asp	Gly	Thr	Ile	Thr	Arg	Ser	705	710	715
Asp	Thr	Leu	Gly	His	Ile	Leu	Pro	Thr	Leu	Gly	Lys	Asp	Trp	Thr	His	725	730	735
Gln	Gly	Ile	Ala	Lys	Leu	Tyr	His	Lys	Val	Ser	Gln	Asn	Gly	Tyr	Lys	740	745	750
Phe	Leu	Tyr	Cys	Ser	Ala	Arg	Ala	Ile	Gly	Met	Ala	Asp	Met	Thr	Arg	755	760	765
Gly	Tyr	Leu	His	Trp	Val	Asn	Glu	Arg	Gly	Thr	Val	Leu	Pro	Gln	Gly	770	775	780
Pro	Leu	Leu	Leu	Ser	Pro	Ser	Ser	Leu	Phe	Ser	Ala	Leu	His	Arg	Glu	785	790	795
Val	Ile	Glu	Lys	Lys	Pro	Glu	Lys	Phe	Lys	Val	Gln	Cys	Leu	Thr	Asp	805	810	815
Ile	Lys	Asn	Leu	Phe	Phe	Pro	Asn	Thr	Glu	Pro	Phe	Tyr	Ala	Ala	Phe	820	825	830
Gly	Asn	Arg	Pro	Ala	Asp	Val	Tyr	Ser	Tyr	Lys	Gln	Val	Gly	Val	Ser	835	840	845
Leu	Asn	Arg	Ile	Phe	Thr	Val	Asn	Pro	Lys	Gly	Glu	Leu	Val	Gln	Glu	850	855	860
His	Ala	Lys	Thr	Asn	Ile	Ser	Ser	Tyr	Val	Arg	Leu	Cys	Glu	Val	Val	865	870	875

Asp His Val Phe Pro Leu Leu Lys Arg Ser His Ser Cys Asp Phe Pro  
885 890 895

Cys Ser Asp Thr Phe Ser Asn Phe Thr Phe Trp Arg Glu Pro Leu Pro  
900 905 910

Pro Phe Glu Asn Gln Asp Met His Ser Ala Ser Ala  
915 920

<210> 6

<211> 26

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 6  
cagacaatga attacgtggg gcagct

26

<210> 7

<211> 25

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 7  
gctgaggctg aatgcatgtc ctggt

25

<210> 8

<211> 20

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 8  
ccatgaatta cgtggggcag

20

<210> 9

<211> 21

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<213> Artificial

<220>

<223> PCR primer

<400> 9  
cgctgaggca gaatgaatgt c

21

<210> 10

<211> 86

<212> PRT

<213> Artificial

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<223> Consensus sequence

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 10

Asn Xaa Xaa Thr Leu Xaa Gly Xaa Ile Asp Xaa Xaa Val Xaa Xaa Xaa  
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Phe His Val Arg Phe Gly Lys  
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Asn  
 35 40 45  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Met Lys Leu Xaa Asp Xaa Gly Xaa Ala  
 50 55 60  
 Xaa Phe Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa  
 65 70 75 80  
 Xaa Leu Xaa Xaa Ser Pro  
 85

<210> 11

<211> 159

<212> PRT

<213> Artificial

<220>

<223> Consensus sequence

<220>

<221> misc\_feature

<223> Xaa is any amino acid

<400> 11

Tyr Xaa Xaa Xaa Xaa Arg Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa  
 1 5 10 15  
 Leu Xaa Xaa Gly Xaa Asn Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Xaa  
 20 25 30  
 Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 35 40 45  
 Xaa Xaa Xaa Xaa Xaa Ser Asp Ile Asp Gly Thr Ile Thr Xaa Ser Asp  
 50 55 60  
 Xaa Leu Gly Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Trp Xaa Xaa Xaa  
 65 70 75 80  
 Gly Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Asn Gly Tyr Xaa Xaa  
 85 90 95  
 Xaa Tyr Xaa Xaa Xaa Arg Xaa Xaa Gly Xaa Xaa Xaa Xaa Thr Xaa Xaa  
 100 105 110

Tyr Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Pro Xaa Gly Pro  
115 120 125

Xaa Xaa Leu Xaa Pro Xaa Xaa Xaa Xaa Xaa Ala Xaa Xaa Arg Glu Val  
130 135 140

Ile Xaa Xaa Xaa Pro Glu Xaa Phe Lys Xaa Xaa Xaa Leu Xaa Asp  
145 150 155

<210> 12

<211> 14

<212> RNA

<213> Artificial

<220>

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<220>

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<223> n is a, c, t, or u

<220>

<221> misc\_feature

<222> (9)..(14)

<223> n is a, c, t, or u

<220>

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<222> (5)..(5)

<223> n is a, c, t, or u

<220>

<221> misc\_feature  
<222> (4)..(3)  
<223> b is g, c, or u

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nnnbngucnn nnnn

14

<210> 13  
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<212> DNA  
<213> Artificial

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<223> PCR primer

<400> 13  
tacgcaggga cacatttcca

20

<210> 14  
<211> 19  
<212> DNA  
<213> Artificial

<220>

<223> PCR primer

<400> 14  
gagagatgca gctgcgtca

19

<210> 15  
<211> 18  
<212> DNA  
<213> Artificial

<220>

<223> PCR primer

<400> 15

cccttgagca cgttcaca

18

<210> 16

<211> 19

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 16

ctgatcggtg tcagtctct

19

<210> 17

<211> 18

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 17

ggttgtgggg accctgga

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<210> 18

<211> 18

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 18

gcctgctgca gatgcgtt

18

<210> 19

<211> 35

<212> DNA

<213> Artificial

<220>

<223> PCR primer

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gctcgaattc agacaatgaa ttacgtgggg cagct

35

<210> 20

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<212> DNA

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<223> PCR primer

<400> 20

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37

<210> 21

<211> 19

<212> DNA

<213> Artificial

<220>



<223> PCR primer

<400> 21  
ggcgagaccc aatccctga

19

<210> 22

<211> 18

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 22  
gggtcttcct ctgtaaga

18

<210> 23

<211> 19

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 23  
cctggccttga gcttgcctt

19

<210> 24

<211> 19

<212> DNA

<213> Artificial

<220>

<223> PCR primer

<400> 24  
cccacggcat gcatcttct

19

<210> 25

<211> 8

<212> PRT

<213> Homo sapiens

<400> 25

Lys Lys Arg Arg Lys Arg Arg Lys  
1 5